

On egg laying behaviour of female and the occurrence of *Chamaesphecia doryceraeformis* Lederer in Turkey (Lepidoptera, Sesiidae)

Muhabbet Kemal Ahmet Ömer Koçak

Abstract: On egg laying behaviour of female and the occurrence of *Chamaesphecia doryceraeformis* Lederer in Turkey (Lepidoptera, Sesiidae). *Cesa News* 75: 1-5, 8 figs.

This short note deals with the egg laying behaviour of the species *Chamaesphecia doryceraeformis* in East Turkey. Egg of the species is illustrated for the first time. *Phlomis kurdica* is firstly reported as larval food-plant of the species.

Key words: *Chamaesphecia doryceraeformis*, Lepidoptera, Sesiidae, behaviour, egg laying behaviour, egg morphology, larval food-plant, fauna, Van, Turkey.

The species was described by Lederer in 1853 from Diyarbakır (SE Turkey) based upon a single male collected by Kindermann, with the original name combination “*Sesia doryceraeformis*”. The species is also recorded from Iraq (Wiltshire, 1957: 143), Iran (Cerf, 1938), and the Caucasus. According to our knowledge¹, the species is known the following provinces of Turkey; Adana, Adıyaman, Amasya, Ankara, Bingöl², Çanakkale, Diyarbakır³, Eskişehir, Konya, Mardin, Nevşehir, Van⁴, Karaman (16.04% of total 81 provinces) (Koçak & Kemal, 2009: 221).

Within the Cesa Project, “Entomofauna of Turkey”, the authors realized numerous trips in 2011, in East Turkey. During the field observations, no pheromone is used. The first author observed and photographed egg laying behaviour of the species *Chamaesphecia doryceraeformis* (det. M.Bakowski) at the slopes of Artos Mountain (Van Province) on the *Phlomis kurdica* Rech.f. ⁵ (det. F.Özgökçe) (*Lamiaceae*) (**Figs. 1-4,7,8**). Loosely laid egg is also photographed later in the laboratory (**Figs.5,6**). The egg is milky white, oval, almost cylindrical. Sculpturing on chorion is under small magnification invisible.

¹ Info-system of the Cesa <http://www.cesa-tr.org/Infos.htm>

² See Garrevoet et al. (2005: 34)

³ Lederer (1853).

⁴ Present record is from Artos Mountain. Besides this species is also recorded from Kurubaş geçidi 2100m on malacophyllous mountain steppe, around yellow flowered *Phlomis*.

⁵ This is an Irano-Turanian element, also found in Lebanon, Syria, and Iraq (Davis, 1982, *Flora of Turkey* 7: 124).

Habitat: The species inhabits in the Anatolian-Iranian mountain steppe vegetation, preferably non-degraded, rich with malacophyllous plant species like *Phlomis* spp. of the family *Lamiaceae*. Diurnal populations of the species are apparently richer in East Turkey (**Fig.7**).

Larval food-plant: *Phlomis capitata* (Spatenka et al., 1996), *Phlomis kurdica* (*Lamiaceae*) present record (**Fig.8**).

Fenology: Adult moths fly in July at upper heights in East Turkey. Eggs are laid in late July.

Briefly, egg-laying habit of *Chamaesphecia doryceraeformis* was previously observed by various authors during their field works, but this behaviour is illustrated here for the first time. Similarly, egg of the species is illustrated here firstly. Second species of the larval food-plant is also reported here.

Acknowledgement

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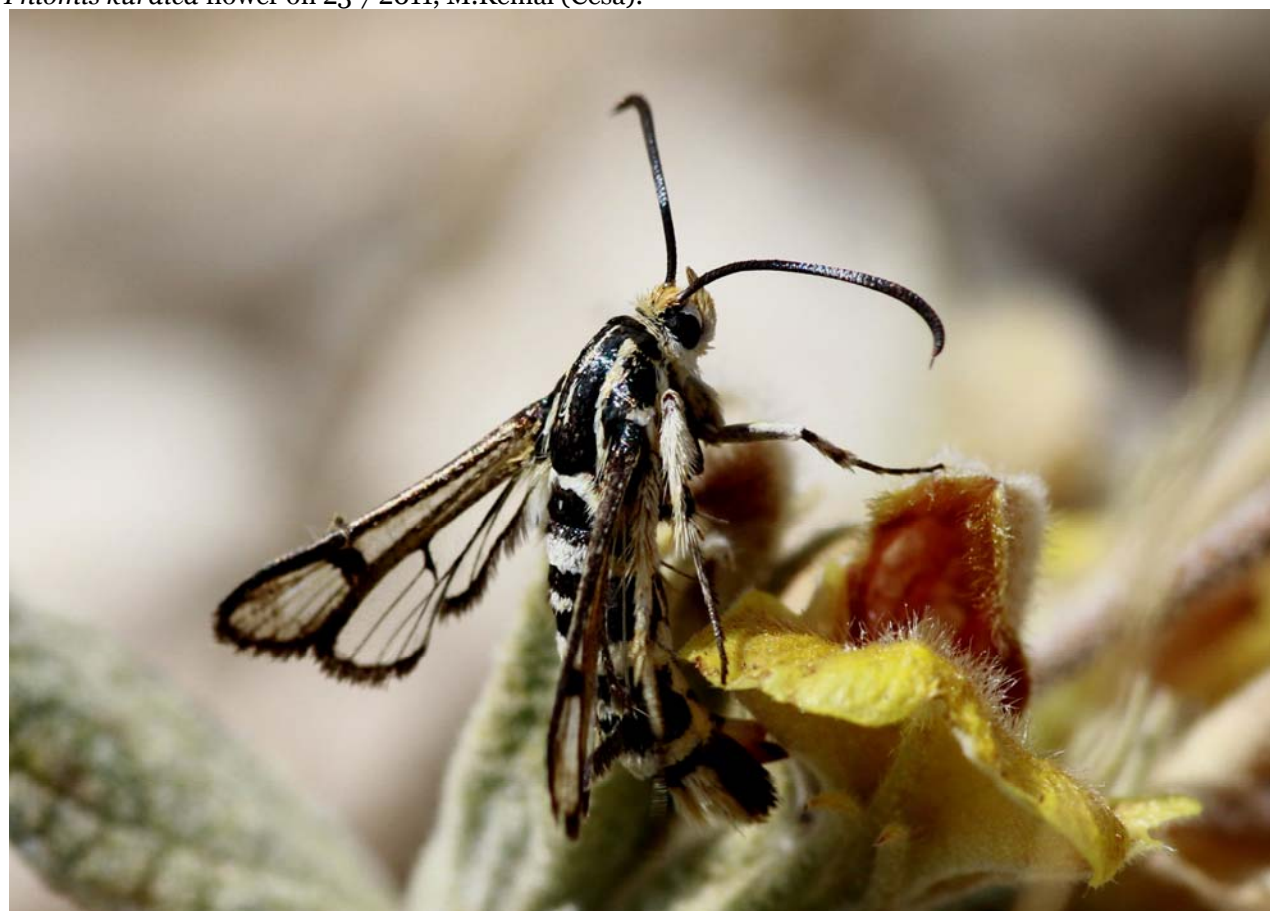
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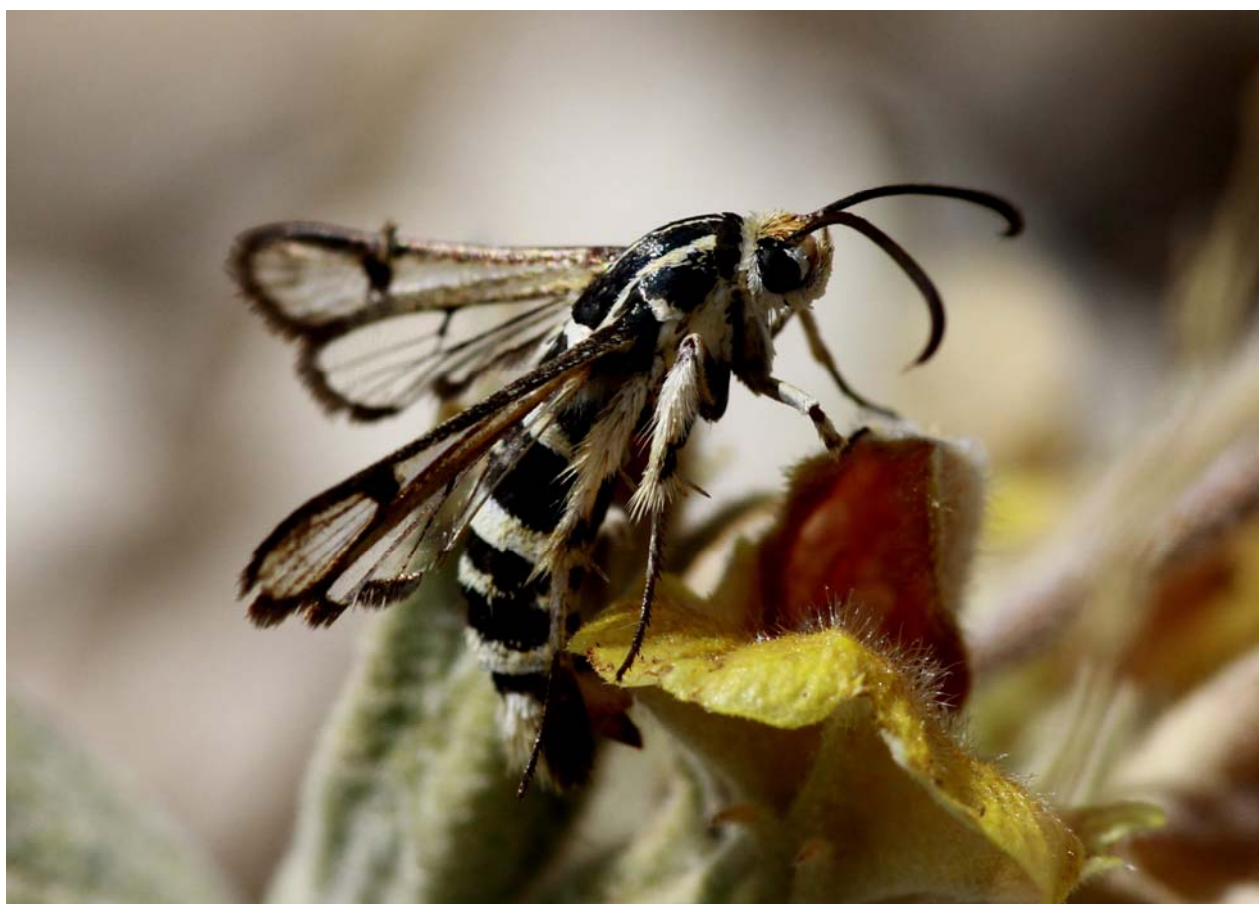


Fig. 1 – *Chamaesphecia doryceraeformis*. Selection of *Phlomis kurdica*, the food-plant for her eggs, 23 7 2011, M.Kemal (Cesa).

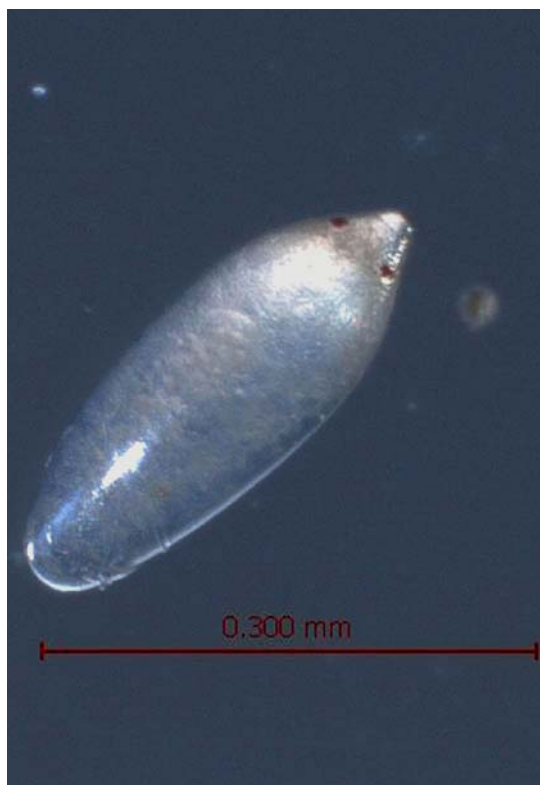


Fig. 2 – *Chamaesphecia doryceraeformis*. Egg laying behaviour of the female to the underside of the *Phlomis kurdica* flower on 23 7 2011, M.Kemal (Cesa).





Figs. 3,4 – *Chamaesphecia doryceraeformis*. Lateral view of the egg laying behaviour to the *Phlomis kurdica* flower, taken on 23 7 2011, M.Kemal (Cesa)



Figs.5,6 – Egg, attached to the flower of *Phlomis kurdica*, taken on 24 7 2011 (left); mature egg, taken in the laboratory on 30 7 2011 (right). M. Kemal (Cesa)



Figs. 7,8 – Habitat of *Chamaesphecia doryceraeformis*, Artos Mountain (Van Province), 1900m, 23 7 2011 (left); *Phlomis kurdica*, larval food plant of the species at the same place and date (right), photo M. Kemal (Cesa)

Description of female and new records of *Shamshevia hoanibensis* Grichanov from Namibia (*Diptera*, *Dolichopodidae*)

Igor Ya. Grichanov⁶

Abstract: Description of female and new records of *Shamshevia hoanibensis* Grichanov from Namibia (*Diptera*, *Dolichopodidae*) - *Cesa News* 75: 6-7, 2 figs.

Additional faunistic records for *Shamshevia hoanibensis* Grichanov in Namibia are given. The female of the species is described and illustrated for the first time.

Key words: *Diptera*, *Empidoidea*, *Dolichopodidae*, *Shamshevia hoanibensis*, Afrotropical Region, Namibia, fauna, description.

Introduction

The genus *Shamshevia* Grichanov, 2012 was described from Namibia (Skeleton Coast, Hoanib River) to accommodate a single species, *Sh. hoanibensis* Grichanov, 2012. Despite flattened posterior mesonotum, the genus was placed in the subfamily *Diaphorinae* and was considered close to the genus *Dactylonotus* Parent, differing from the latter in peculiar characters of male antenna, wing and genitalia.

The genus was described by males only with the following set of characters. Body and wing length less than 2 mm; body and legs with all bristles white. Antennal scape with long pointed ventral process; pedicel with short visible base, with long concealed conus reaching basal 1/3 of postpedicel; postpedicel flat, long, band-like, with pointed apex. Arista-like stylus basodorsal, with long segment 1 and short segment 2. Palpus large, ovate, white, with short apical seta. Thorax entirely dark brown. Wing with R_{4+5} and M_{1+2} subparallel in middle part and slightly divergent on apical part of wing; M_{1+2} broadly curved anteriorly in apical half; *dm-cu* faint, located at wing base, at level of *r-m*.

It was unclear, what characters of this set are male secondary sexual characters (MSSC). Here I describe and illustrate females of *Sh. hoanibensis* for the first time.

Material and methods

Material cited in this work is housed at the Namibian National Insect Collection, National Museum of Namibia, Windhoek (NMNW) and the Zoological Institute of the Russian Academy of Sciences, St. Petersburg (ZIN). *Sh. hoanibensis* was studied and illustrated with a ZEISS Discovery V-12 stereomicroscope and an AxioCam MRc5 camera. Morphological terminology and abbreviations follow Grichanov (2007) and Cumming and Wood (2009). The relative lengths of the antennomeres should be regarded as representative ratios and not measurements. Body length is measured from the base of the antenna to the tip of abdominal segment 5. Wing length is measured from the base to the wing apex.

Shamshevia hoanibensis Grichanov, 2012 (Figs. 1,2)

Material. 1♂, 20♀ (in alcohol), Namibia: Khorixas District, Huab River, Krone 721, 20°37'09"S, 13°54'31"E, 23-26.x.1998, A.H. Kirk-Spriggs; 1♂, 30♀ (in alcohol), Namibia: Omaruru District, 2 km W Brandberg West, 20°58'05"S, 14°06'36"E, 22-24.x.1998, Kirk-Spriggs & Marais.

⁶ All-Russian Institute of Plant Protection Podbelskogo 3, 196608 St.Petersburg-Pushkin, Russia - E-mail: grichanov@mail.ru

Description. Female. Similar to male except lacking MSSC (see Grichanov, 2012), otherwise as follows.

Length (mm): body 2.4, antenna 0.7, wing 2.3.

Body with all bristles and hairs white, mid and hind coxae and legs with brownish major bristles. Head: face under antenna twice as wide as basal height of postpedicel, slightly convergent ventrally. Antennal scape with short subtriangular pointed ventral process; pedicel with short conus concealed within postpedicel; postpedicel as long as high at base, with flattened rounded apex. Arista-like stylus middorsal, with short segment 1 and long segment 2. Length ratio of scape to pedicel (visible part) to postpedicel to stylus (segments 1 and 2), 6/4/10/12/30. Proboscis and palpus small. Six pseudotrachea on each side. Abdomen: with 5 visible segments; each hemitergite of last segment with two short thick setae.

Distribution. To date *Sh. hoanibensis* is known only from three points of the Namib Desert (Hoanib River, Huab River and Brandberg env.). I saw material with additional undescribed species of *Shamshevia* from India (Goa).

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Fig. 1 - *Shamshevia hoanibensis* Grichanov, female in alcohol, general aspect.



Fig. 2 - *Shamshevia hoanibensis* Grichanov, female head in alcohol.

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